

## ABSTRACT OF THE DISCLOSURE

A serving MSC in a wireless communication network, such as an IS-2000 network, uses standard signaling messages in an unconventional manner to allow it to take on the role of an anchor MSC under certain inter-MSC handoff conditions. When a mobile station engaged in an active packet data call is handed off from an anchor MSC to the serving MSC, the serving MSC sends an indication to the anchor MSC that the data call has been released even though the call is still active. The serving MSC then causes the HLR location information for the mobile station to be updated to identify the serving MSC as the new anchor MSC. Thus, the serving MSC becomes the anchor MSC under conditions where it otherwise would not, which avoids routing subsequent voice calls through the previous anchor MSC. The above approach also includes variations that accommodate concurrent voice and data handoff scenarios.